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Northeast and Caribbean Region

ISSUED TO:

BOOZ ALLEN HAMILTON INC.
GSA ALLIANT CONTRACT-GS00Q09BGD0019

PERFORMANCE-BASED STATEMENT OF WORK (PBSOW)
For
SYSTEMS ENGINEERING AND TECHNICAL ASSISTANCE SERVICES

DEPARTMENT OF ARMY (DA)
PROJECT MANAGER (PM) WARFIGHTER INFORMATION NETWORK-TACTICAL (WIN-T)
ABERDEEN PROVING GROUND (APG), MD 21005

PBSOW# GSQ0215CJ0005
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1 INTRODUCTION

Project Manager Warfighter Information Network-Tactical (PM WIN-T) provides the communications network and services that allows the Warfighter to send and receive information in order to execute the mission. Information is the element of combat power that allows Commanders to magnify the effects of maneuver, firepower, and protection. WIN-T is the transformational Command and Control system that manages tactical information transport at theatre through Company Echelons in support of full spectrum Army operations.

The WIN-T Network is currently being fielded incrementally to the Army. WIN-T Increment 1 provides networking capabilities "At-The-Halt" down to the Battalion level and has completed its fielding to Army Units. WIN-T Increment 2 builds on Increment 1 capabilities and provides initial networking "On-The-Move" down to the Company level only for select Maneuver Brigades. WIN-T Increment 3 will provide combined Network Operations management capability, updated Network Centric Waveform (NCW) functionality and development and demonstration of the updated Highband Networking Waveform (HNW) capability in support of WIN-T fieldings for the Brigade Combat Team (BCT) modernization and Army Capability Sets.

The WIN-T Increments are designated an ACAT ID program which is subject to the management, review and approval processes of DoDI 5000.02. PM WIN-T is chartered with the life cycle acquisition management and support responsibility for all of the systems and products it is assigned. A critical attribute of the Contractor for this effort is an in depth knowledge and experience implementing the requirements of DoDI 5000.02. This is essential to the timing, program milestone approvals and success of its programs and the overall mission of PM WIN-T.

2 SCOPE

This Performance Based Work Statement (PBSOW) specifies systems engineering support tasks that the contractor shall perform in support of PM WIN-T programs. These Systems Engineering and Technical Assistance (SETA) non-personal services include expertise not readily available within the Project Management Office or supporting Communications-Electronics Command (CECOM) Life Cycle Management Center (LCMC) matrixes and other U.S. Government offices. These services provide the flexibility required for tasks, which cannot be accomplished by the U.S. Government organization within the available time. It is an objective of these services to provide the support needed to assist the PM WIN-T programs and projects to successfully achieve their program milestones and mission needs in an effective and efficient manner. The efforts described in the PBSOW comprise a broad range of efforts including: strategic planning; concept development and requirements planning; systems design, engineering and integration; technology insertion/systems integration; engineering and technical documentation support; software/hardware engineering; preparation of independent assessments; systems engineering solutions; value engineering; test integration and evaluation; integrated logistics support; and acquisition and life cycle management as set forth herein. This support includes assisting WIN-T, its Product Managers (PdMs), WIN-T divisions, project teams, and support some of the following programs and projects as requested, during any or all phases of the

system's/equipment acquisition life cycle as described in DoDI 5000.02: (Note: This list will change in response to new direction and to keep pace with evolving Army needs.)

- Area Common User System Modernization (ACUS) Inc 1
- En-route Mission Capability (EMC) Inc 1
- Fight the Network (FTN)
- Global Broadcast System (GBS)
- Global Rapid Response Information Package (GRRIP)
- MILSATCOM Systems Engineering
- NETOPS Integration
- Phoenix
- SATCOM Commercial Satellite Terminal Program (SATCOM-CSTP)
- Signal Modernization Inc 1
- Secure Mobile Anti-Jam Reliable Tactical Terminal (SMART-T)
- Transportable Tactical Command and Control (T2C2)
- TCDMP
- Tactical Internet Management System (TIMS)
- Warfighter Information Network-Tactical (WIN-T) Increments 1, 2 & 3
- Other Program Executive Office (PEO) Command, Control, and Communication-Tactical (C3T) Programs & Projects Support, as directed
- PM WIN-T Operations & Support

3 REQUIREMENTS/TASKS ((PERFORMANCE WORK STATEMENT))

The tasks and efforts described herein require the contractor to provide systems engineering and related assistance in support of programs managed and supported by PM WIN-T. The following tasks shall be performed by the contractor.

3.1 TASK 1. STRATEGIC PLANNING FOR TECHNOLOGY PROGRAMS/ ACTIVITIES

Services required under this functional area include the definition and interpretation of high-level system of system requirements involving projects, systems, missions, and the objectives and approaches to their achievement. The contractor shall provide support to PM WIN-T's strategic planning for technology programs and activities falling within PM WIN-T's mission.

3.2 TASK 2. CONCEPT DEVELOPMENT AND REQUIREMENTS ANALYSIS

Services required under this functional area include abstract or concept studies and analysis, requirements definition, preliminary planning, the evaluation of alternative technical approaches and associated costs for the development or enhancement of high level general performance specifications of a system, project, mission or activity. The contractor shall provide support for concept development and requirements analysis of new capabilities and projects which impact the WIN-T mission.

3.3 TASK 3. SYSTEM DESIGN, ENGINEERING AND INTEGRATION

Services required under this functional area include supporting the translation of a system (or subsystem, program, project, activity) concept into a preliminary and detailed design (engineering plans and specifications), performing risk identification/analysis/mitigation, requirements traceability, and integrating the various components to produce a working prototype or model of the system when requested.

The contractor shall provide system engineering process support to include: Requirements Analysis, Functional Analysis and Allocation, Design Synthesis, Verification and provide System Engineering Process Outputs as requested by the Government. The contractor shall provide engineering support, to include electrical and mechanical engineering, to analyze system concepts, system design and interoperability, and provide recommendations for PM WIN-T programs assigned. The contractor shall provide systems engineering support related to the network integration, hardware, software, integration and capabilities of PM WIN-T's systems and assist in developing solutions to systems engineering challenges based on technology insertion and new product integration. This support shall be applicable to all aspects of military tactical communications, to include radio frequency, antennas, and radio design. The contractor shall review and analyze development, production, and system support proposals as well as participate in program reviews and make independent evaluations of technical performance and progress. The contractor shall prepare contract technical documents, specifications and statements of work for developmental projects, and make trade-off/best technical approach analyses.

3.3.1 TECHNOLOGY INSERTION/SYSTEMS INTEGRATION

The contractor shall review designs and documents to support the integration of new equipment and technologies into all PM WIN-T Systems. Potential changes include armoring, enhancement of radio frequency and waveform capabilities, interoperability with the satellite segment and enhancements with respect to interoperability with the global information grid and other emerging networking and network operations capabilities. The contractor shall apply a systems engineering approach to ensure that mission objectives and system criteria requirements are fulfilled. Emphasis shall be on the demonstration of clear and definable improvements in the performance, logistics supportability, reliability and maintainability of the item. The contractor shall assist in the evaluation of prototype equipment and modifications to assess replacement suitability.

The contractor shall conduct technical assessments and trades as part of the system design and development to ensure the modular and open system architecture can support future technology insertion.

3.3.2 ENGINEERING AND TECHNICAL DOCUMENTATION SUPPORT

The contractor shall prepare, review and update engineering and technical documentation, as provided, to support timely and effective acquisition of all WIN-T programs. The contractor shall attend meetings and conferences to facilitate maintaining the currency of technical documentation. Tasking shall be provided to identify the meeting location, security requirements, and method of documentation.

3.3.3 SOFTWARE/HARDWARE ENGINEERING

The contractor shall review and analyze the technical necessity, accuracy, and completeness of proposed engineering changes to hardware and software baselines for the purpose of ensuring continued satisfaction of system performance and interoperability requirements. For each proposed change, the contractor shall determine if the impact of the proposed change on all other aspects of the program has been adequately analyzed and satisfactorily incorporated into the overall implementation plan. If required, the contractor shall conduct trade-off studies to identify the most advantageous technical approach to resolve specific engineering change issues.

3.3.4 PREPARATION OF INDEPENDENT ASSESSMENTS

The contractor shall provide independent evaluation of the performance of any PM WIN-T system as assigned. The contractor shall be familiar with each program and provide the Program Office with detailed assessments. The contractor shall be required to assist in the technical analysis of program goals and objectives, requirements analysis, organizational performance assessment, special studies and assist preparing reports providing conclusions and recommendations. The contractor shall collect and analyze data related to the specific area and prepare a detailed report which identifies the problem, documents the problem's potential impact on the programs and provides recommended alternatives or solutions.

3.3.5 SYSTEMS ENGINEERING SOLUTIONS

The contractor shall provide engineering support, to include electrical and mechanical engineering, to analyze system concepts, system design and interoperability, and provide recommendations for PM WIN-T programs assigned. The contractor shall provide systems engineering expertise related to the hardware, software, integration and capabilities of PM WIN-T systems and assist in developing solutions to systems engineering challenges based on technology insertion and new product integration. This expertise shall be applicable to all aspects of military tactical communications, to include radio frequency, antennas, and radio design. The contractor shall review and analyze development, production, and system support proposals as well as participate in program reviews and make independent evaluations of technical performance and progress. The contractor shall prepare contract technical documents, specifications and statements of work for developmental projects, and make trade-off/best technical approach analyses.

The contractor shall review and analyze system, subsystem, software, and interface designs for the purpose of ensuring that required performance characteristics and the retention of interoperability with existing and planned elements are attained in the most efficient manner.

If required, the contractor shall conduct trade-off studies to identify the most advantageous technical approach to resolve specific design issues, and if directed by the government, develop prototype solutions. If required, the contractor shall participate in source selection actions and prepare technical specifications and other acquisition documentation suitable for use by the government in acquiring PM WIN-T elements.

3.3.6 VALUE ENGINEERING

The contractor shall review equipment and systems in development and production programs and propose Value Engineering Proposals (VEPs) when applicable. An analysis shall be conducted to assess overall Army life cycle costs of various designs. Contractor personnel shall evaluate the original equipment manufacturer's Value Engineering Change Proposals (VECPs) as well as value engineering methods for adequacy and contract compliance.

3.4 TASK 4. TEST, EVALUATION AND QUALITY ENGINEERING

Services required under this functional area include the application of various techniques demonstrating that a prototype system (subsystem, program, project or activity) performs in accordance with the objectives outlined in the original design.

The contractor shall provide Test and Evaluation (T&E) support in all phases of the life cycle, to include review of test plans and procedures for accuracy and adequacy; design tests to include planning test resource requirements; witness tests and provide technical support; prepare coordinated test plans in accordance with appropriate Army regulations; and analyze/evaluate test results and prepare independent evaluations of systems performance. The contractor shall develop/contribute to C4ISR guidelines/plans/policies, analyses and reviews that require expertise in the areas of Test and Evaluation Master Plan (TEMP) Preparation/Review, Test/Evaluation Report Review, Test Readiness Reviews (TRRs) and T&E Working Integrated Product Teams (WIPTs).

The contractor shall review and analyze system test programs. In the course of conducting these actions, the contractor shall review test plans, test procedures, and test reports for the purpose of ensuring that the test actions to be conducted are adequate to evaluate adherence to established requirements. The contractor shall identify areas of considerable technical risk and recommend the independent test actions necessary to minimize the identified risk. The contractor shall participate in, witness, and/or conduct test activities as required. For each action in which the contractor conducts test activities, the contractor shall prepare test plans and procedures and submit them for approval prior to conducting any test activities.

The contractor shall provide technical support related to reliability, maintainability, operational availability and human factors engineering for all WIN-T products. The contractor shall analyze and review technical proposals, contractor's quality programs and inspection plans, first article test, environmental, production, in-process and acceptance test plans, procedures and reports. The contractor shall review and prepare assessments of

development and operational test plans and reports and conduct various studies involving failure analysis reports, equipment performance reports, quality deficiency reports, Engineering Change Proposals (ECP's) and deviation/waiver requests. The contractor's applicable personnel shall attend Quality Program Reviews, Project Control Boards, and Government/Contractor conferences, as necessary, to provide independent review and assessment of the discussions involving Electromagnetic Interference /Electromagnetic Compatibility (EMIEMC), TEMPEST, and Reliability, Availability and Maintainability (RAM).

3.5 TASK 5. INTEGRATED LOGISTICS SUPPORT

Services required under this functional area include the analysis, planning and detailed design of all engineering specific logistics support including material goods, personnel, and operational maintenance and repair of systems throughout their life cycles.

The contractor shall provide logistics support services to include:

- Training: New Equipment Training, Professional Development Training, Training Simulation
- Human Factors Engineering (HFE)
- Validation and Verification of Training Material and Technical Manual
- Total Package Fielding
- Integrated Logistics Support
- Logistics Documentation
- Supply Support
- Provisioning Support: Prepare and review provisioning data, support provisioning processes by participation in provisioning meetings and conferences
- Technical Field Service: Investigating, defining, assessing, and correcting equipment/system technical and/or operational problems experienced at test or field operational sites
- Security Assistance Management (SAM)/Foreign Military Sales (FMS)
- Vehicle Maintenance
- Logistics Information Systems
- Transition to sustainment support
- Material Release Support

3.6 TASK 6. ACQUISITION AND LIFE CYCLE MANAGEMENT

Services required under this functional area include the entire planning, budgetary, contract and systems/program management execution functions required to procure and/or produce, render operational and provide life cycle support (maintenance, repair, supplies, engineering specific logistics) to technology-based systems, activities, subsystems, projects, etc.

3.6.1 ACQUISITION ENGINEERING SUPPORT

The Contractor shall prepare, review and update program documentation in support of milestone decisions/reviews. The Contractor shall review and prepare acquisition documents in support of milestone reviews and contract management in support of the acquisition process. The Contractor shall be knowledgeable in all facets of DoDI 5000.02 acquisition and engineering processes/documentation. The contract shall prepare acquisition documentation as requested by the government. The Contractor shall advise the government in regard to contract management to include the preparation of draft contract letters, assisting in the technical review of proposals and establishment of technical positions in negotiations, continuous/comprehensive assessment of potential issues of on-going contractual activities, assessment of potential impacts of contract changes and other contract managerial activities.

3.6.2 PROGRAM & BUDGET DOCUMENTATION

The Contractor shall support the preparation of and review of program and budget documentation, to include program milestones, estimated cost and manpower requirements, justification for costs and manpower, justification for delays in program spending, modifications to program and budget submittals based on delays, and back-up data/charts. The Contractor shall be prepared to support budget processes/budget reviews as required for all WIN-T programs.

3.6.3 PROGRAM/BUDGET SCHEDULING AND PLANNING

The Contractor shall provide program/budget scheduling and planning services that involves formulating both broad and specific guidelines for planning program elements and sub-elements. The Contractor shall prepare recommendations for program objectives, operating schedules, resource requirements, and overall program plans. The Contractor shall participate in engineering, program/budget reviews with all levels of the Department of Defense. The Contractor shall prepare, analyze and update budgetary documentation in support of all WIN-T programs. The Contractor shall review the current documents together with other pertinent documents and revise or update the documentation to reflect the current program status, which support the execution process. Access to Five Year Defense Plan (FYDP) and Planning, Programming, & Budgeting System (PPBS) is required and the necessary approvals in accordance with DODD 7045.7-H and 7045.14 will be obtained by the COR and kept on file.

3.6.4 EARNED VALUE MANAGEMENT

The Contractor shall assist in conducting and participating in Integrated Baseline Reviews (IBRs), compliance reviews and/or cost/schedule status report reviews. The Contractor shall review each PM WIN-T system contractors' management control systems, interview the Contractor's Control Account Managers, and assess compliance with Earned Value Management System (EVMS) in accordance with DODI 5000.02.

3.6.5 MANPOWER MANAGEMENT

The Contractor shall prepare, analyze and update manpower documentation in support of all WIN-T programs. The Contractor shall perform analysis of contractor support requirements, along with justification and costs associated with manpower support. The Contractor shall track manpower trends/analysis against program funding and provide recommendations to the government.

3.6.6 Operation and Support

The contractor shall support Operation and Support Division with updating Operation Share Point Center (OSC), a Microsoft Sharepoint developed system. The contractor shall analyze and support, update, customize, and manage OSC as required. The contractor shall draft communications, and work on employee surveys as required.